April 1958

NOMINATIONS FOR OFFICERS

The Council of the Geochemical Society has selected from the nominations proposed by the Nominating Committee the following slate of officers for the Geochemical Society, to hold office from November 1958 to November 1959:

President Vice President

Secretary Treasurer

Councilors

John Schairer

T. F. W. Barth

Konrad B. Krauskopf George T. Faust

A. E. Engel

F. G. Houtermans

The mail ballots will be sent out by the Secretary at a later date. The nominations for 1959-1960 will be brought to the Council meeting in St. Louis in November by the new Nominating Committee.

In connection with the election, the membership is reminded of By-law No. IV of the Constitution of the Society: "Nominations for office shall be made by the Council, one nomination for each office. They shall be made known to the members at least three months before the annual meeting. Other nominations may be made in writing by any ten members; they must be in the hands of the secretary at least forty-five days before the annual meeting. Ballots carrying all nominations without distinction between those of the Council and any others shall be distributed to the members. The officers elected shall enter on duty at the adjournment of the annual meeting."

The secretary of the Geochemical Society is:

Professor K. B. Krauskopf, Dept. of Geology, Stanford University, Stanford, Calif.

NEW MEMBERS

As reported to the Treasurer since the publication of the membership list in February 1957 and up to December 10, 1957:

Mr. Laurence E. Allen, Jr. 404 No. Euclid Pierre, South Dakota

Mr. Norbert L. Archbold U. S. Geological Survey P.O. Box 360 Grand Junction, Colorado

Dr. Alfredo San Miguel Arribas Laboratorio de Petrologia Universidad de Barcelona Barcelona, Spain

Dr. Charles S. Bacon Case Institute of Technology University Circle Cleveland 6, Ohio

Dr. Paul Bartholome Université Lovanium Léopoldville, Belgian Congo Dr. Bruno Brehler Mineralogisches Institut der Universität (16) Marburg/Lahn Deutschhausstrasse 10, Germany

Dr. Paul L. Cloke Suite 33 89 Strathmore Road Brookline 46, Massachusetts

Dr. F. W. D. Cornwall Chartered Exploration Ltd. Exploration House Simpkins Road, Lusaka Northern Rhodesia

Dr. Jósé J. Coves Colón 36-38, 10 Badalona, Spain

Mr. James Harvie Crocket Rm. 518-B, The Graduate House Mass. Institute of Technology Cambridge 39, Massachusetts Dr. A. A. Giardini 61 Sternberger Ave, West End, New Jersey

Dr. Walter Henle 4702 Ingersoll Houston, Texas

Dr. William T. Higdon 3737 Bellaire Blvd. Houston, Texas

Mr. Willard Hogeboom Department of Geology Syracuse University Syracuse, New York

Dr. Ronald H. C. Homan Dept. of Mines and Technical Surveys Geological Survey Victoria Museum Ottawa, Canada

Prof. Clifford A. Hopson Department of Geology John Hopkins University Baltimore 18, Maryland

Mr. Rollyn P. Jacobson 324 South Olympia Tulsa, Oklahoma

Prof. Karl Jasmund Mineralogisch-Petrographisches Institut der Universität Köln Zülpicher Str. 47 Köln, Western Germany

Mr. R. A. Javitch 1589 McGregor St. Montreal 25, Quebec, Canada

Dr. P. M. Jeffery
Department of Physics
The University of Western Australia
Nedlands, Australia

Mr. Charles P. Miller Box 761 Central Valley, California

Mr. Robert J. M. Miller 100 St. Jean Bosco Apartment 11 Quebec, P. Q., Canada

Dr. Nobuo Morimoto Geophysical Laboratory 2801 Upton St., N. W. Washington 8, D. C. Prof. D. G. Mueller Fac de Geologia Escuela de Ingenieria Quimica Casilla 783 Universidad, Concepcion Chile, South America

Mr. Jack W. Oney 553 South St., Andrews Place Los Angeles 5, California

Dr. Liberto de Pablo-Galán 140 Lordhall The Ohio State University Columbus 10, Ohio

Prof. Linus Pauling
Department of Chemistry
California Institute of Technology
Pasadena, California

Mr. B. Osborne Prescott 3618 Elmridge St. Houston 25, Texas

Mr. Desmond A. Pretorius Frobisher Limited P.O. Box 413, Livingston Northern Rhodesia, Africa

Mr. Charles T. Prewitt
Dept. of Geology & Geophysics
Mass. Institute of Technology
Cambridge 39, Massachusetts

Mr. W. R. Purcell 3737 Bellaire Blvd. Houston 25, Texas

Prof. Ekkehard Preuss Sain Privatstrasse 11 Munchen 8, Germany

Dr. Emma Sainz-Amor Vilamari 23 Barcelona, Spain

Mr. Ronald H. Schleifer Simonds Abrasive Company Tacony and Fraley Streets Philadelphia 37, Pennsylvania

Mr. Chester M. Smith, Jr. R. F. D. #2, Box 228 Springfield, Vermont

Dr. Derek Wardle Spencer 10032-112 Street Edmonton, Alberta, Canada

Mr. Charles J. Spengler U. S. Geological Survey Washington 25, D. C.

Mr. Alfred H. Truesdell U. S. Geological Survey Washington 25, D. C.

Mr. William W. Virgin, Jr. Dept. of Geology Dickinson College Carlisle, Pennsylvania

Mr. Charles E. Weir 1206 Kearny St., N. E. Washington 17, D. C.

Mr. Harry V. Welch 2649 N. Commonwealth Ave. Hollywood 27, California Mr. John E. Wolfe 3158 Jersey Way Sacramento 21, California

Dr. Dan H. Yaalon Department of Geology The Hebrew University Jerusalem, Israel

Dr. Edward J. Zeller Department of Geology University of Kansas Lawrence, Kansas

JOURNALS AND REPORTS

Research for Industry

News bulletin published by the Stanford Research Institute, Menlo Park, California. Apparently available upon application. No price indicated. Volume 10, No. 1, for January 1958 contains articles on "Unique Antenna System", "Preserving Foods by Irradiation", "Irradiation Effects on Structural Adhesives", "Instrumentation", "Predicting Electronic Part Life", as well as minor news items.

The Magazine of Datamation

Published monthly by the Relyea Publishing Corporation, 103 Park Ave., New York 17, N. Y., and circulated without charge by name and title to the manufacturers and users of automatic information-handling equipment in all branches of business, industry, government and military installations. Qualified individuals in the United States and Canada are invited to request this publication on their official letterhead, stating position and business of their organization. Available to others by subscription at the rate of \$10.00 annually. Volume 3, No. 8, for November-December 1957 contains articles on computer installation, computer economics, research in intelligence measurement, a high-speed switching transistor, and a magnetic memory unit.

Industrial Laboratories, The Magazine of Research and Development

Published monthly by Industrial Laboratories Publishing Company, 201 N. Wells St., Chicago 6, Illinois. Circulated without charge to persons holding responsible positions in industrial research. Qualified individuals in the United States and Canada may request this publication on their letterhead, stating position and organization's business. Available to others by subscription at the rate of \$10.00 per year.

Volume 9, No. 3, for March 1958 contains feature articles on electrochemical process to mark metal specimens, on the exploration of personality factors in research and development, on the position of fuels in our future, on serendipity, on the use of high-strength steel in supersonic aircraft, as well as numerous smaller items in diverse fields of industrial research.

The International Journal of Applied Radiation and Isotopes

Published by the Pergamon Press, 4 and 5 Fitzroy Square, London W. 1, England. Private subscribers may take advantage of the specially reduced price of \$21.50 per year. The specimen issue for 1958 which is at hand lists technical papers presented at the first International Conference on Radioisotopes in Scientific Research, abstracts of papers published in previous issues of the journal, a specimen section of abstracts and papers, as well as a list of papers accepted for publication in future issues.

Research Needs in Petroleum Geology

By the American Association of Petroleum Geologists Research Committee. Reprinted for private circulation from the Bulletin of the A.A.P.G., Vol. 41, No. 8, pp. 1854-1876, 1957. A summary of the studies and recommendations by members of the A.A.P.G. Research Committee and the local study groups that cooperated with them. It includes a summary of the research status and needs in the following fields:

- I. Characteristics of dominantly detrital sediments
 - A. Recent detrital sediments; B. Diagenetic changes in detrital sediments; C. Interpretation of ancient detrital sediments
- II. Characteristics of dominantly carbonate sediments
 - A. Recent carbonate sediments; B. Diagenetic changes in carbonate sediments; C. Interpretation of ancient carbonate sediments

III. Minor sedimentary types

A. Evaporites; B. Cherts; C. Sedimentary iron ores and phosphates;

D. Coals

- IV. Correlation and age dating of sediments
 - A. Paleontology; B. Lithologic methods of correlation; C. Logging devices; D. Isotope methods; E. Other correlation and age-dating methods

V. Tectonics

A. Faulting; B. Folding; C. Salt dome intrusions; D. "Basement" rocks

VI. Origin, migration, and accumulation of petroleum

A. Origin; B. Migration; C. Accumulation; D. General; case studies

VII. Geologic history of sedimentary basins

A. Stratigraphy; B. Structural history; C. Integration of stratigraphic and structural studies

Review of J. Kašpar, J. Smid, J. Eckstein: Monokrystaly (Single Crystals), SNTL Praha 1957. Abstract of the English Summary, pp. 197-201, by Zdeněk Pacal, ÚÚG Praha, ČSR.

The book, based on the authors' experiences and on the published literature, is divided into two parts:

1. The first part illustrates the fundamental theory of single crystals together with the introduc-

tion into crystal chemistry.

2. The second part is a summary of that information obtained in Czechoslovakia and that published in foreign technical literature. Growing of single crystals is divided into the following sections: crystallization from solutions, hydrothermal synthesis, crystallization of metals, some special methods for the preparation of inorganic and organic single crystals, the Verneuil synthesis.

At the end of the book, the growth and qualities of synthetic single crystals of great importance in industry are described: Seignette salt, ADP, KDP, EDT, DKT crystals, quartz, aluminum phosphate, tourmaline, diamond, germanium, silica, alkali halides (NaCl, KCl, KBr, LiF, etc.), fluorspar, sodium nitrate, scheelite, phlogopite, corundum, and spinel and its colored varieties. The index of the literature contains 384 articles and books including the Czechoslovakian works.

After 1945 the number of countries in which the production of single crystals for technical purposes had been begun was increased by the addition of Czechoslovakia. Besides the Mineralogical Institute of the Technical University for Chemical Technology (VŠCHT) in Prague, the Institute for Minerals in Turnow (VÚM), the Institute for Electrotechnical Physics (VÚPEF) in Prague, the Institute of Technical Physics of the Czechoslovakian Academy of Sciences, the Inorganic Laboratory of the Slovakian Academy of Sciences and some other laboratories, production also began within the operations of the Ministry of Chemical Industry.

MEETINGS--PAST AND FUTURE

Canadian Prospectors and Developers Association and associated societies

On March 9-12 there was held in Toronto, Ontario, the joint meeting of the 26th Annual Convention of the Canadian Prospectors and Developers Association, the 11th Annual Meeting of the Geological Association of Canada, and the 3rd Annual Meeting of the Mineralogical Association of Canada. The program, which was a highly successful one, combined papers of widespread general interest in the fields of prospecting, geology, and mineralogy along with several papers dealing with more specific fields and areas.

Among the papers that are of considerable interest to geochemists are the following:

Missiles metallurgy. J. R. Townsend, Special Assistant to the Assistant Secretary of Defense, Research and Engineering, Dept. of Defense, Washington, D. C.

Potash developments in Saskatchewan. D. M. Mode, Director, Metallic and Industrial Minerals, Dept. of Mineral Resources, Regina, Saskatchewan.

The limestone industries of Ontario. D. F. Hewitt, Geologist, Dept. of Mines, Toronto, Ontario.

Modern concepts of clay mineral structures. J. W. Earley and I. H. Milne, Gulf Research and Development Company, Pittsburgh, Pa.

Geochemical reconnaissance of part of Nova Scotia. R. H. C. Holman, Geologist, Geological Survey of Canada, Ottawa, Ontario, Canada.

Economic geology of the rare-earth elements. E. Wm. Heinrich, Department of Mineralogy, University of Michigan.

The uranium-bearing conglomerates of the Blind River - Algoma area. S. W. Holmes, Chief Geologist, Consolidated-Dennison Mines, Elliot Lake, Ontario.

Scapolite studies -- a progress report. D. M. Shaw, Chairman, Dept. of Geology, McMaster University, Hamilton, Ontario.

The chromite deposits of southeastern Manitoba. J. F. Davies, Chief Geologist, Dept. of Mines and Natural Resources, Winnepeg, Manitoba.

The Labrador uranium area. A. P. Beavan, Geologist, British Newfoundland Exploration, Ltd., Montreal, Quebec.

Most of the papers presented under the auspices of the Prospectors and Developers Association are to be published in the April number of the Canadian Mining Journal. However, papers presented by the members of the Geological Association and Mineralogical Association of Canada are not presently being published, and readers of the Geochemical News should contact the respective authors if they are interested in any of the above subjects.

Industrial Extension Course in X-ray Diffraction Analysis,

June 9-20, 1958, Illinois Institute of Technology

The course will consist of lectures and closely supervised laboratory exercises designed to provide complete training in The Powder Method in X-ray Crystallography including: Elementary x-ray diffraction theory, Principles of the powder method, Powder cameras and counter diffractometry, Procedures of making powder diagrams, Interpretation of powder diagrams, Indexing of powder diagrams, Identification of unknown substances, Quantitative analysis, Accurate lattice constant determination, Other applications of the powder method. In the laboratory, the latest powder cameras and counter diffractometers will be used. Tuition is \$250 and includes all necessary supplies.

For further information contact Prof. Leonid V. Azaroff, Dept. of Metallurgical Engineering, Illinois

Institute of Technology, Technology Center, Chicago 16, Illinois.

Seventh National Clay Conference

The Seventh National Clay Conference will be held at the U.S. National Museum (Natural History Building), Smithsonian Institution, 10th and Constitution Ave., N.W., Washington, D.C., on October 20-23, 1958. As were the previous six conferences, the Seventh National Conference is under the auspices of the Clay Minerals Committee of the National Research Council. All those interested in research or technology in fields related to clays or clay minerals are cordially invited to participate.

Program -- A 4-day program is planned, including a field excursion on the first day and technical sessions during the remaining 3 days. There will be no evening technical sessions but a banquet will be held on Wednesday evening, October 22.

The general theme selected for the conference is "Geology of Clay Deposits." It is hoped that a number of papers closely related to this theme will be submitted. However, as in the previous conferences, papers of general interest on any phase of the broad subject "Clays and Clay Minerals" will be welcomed.

Submission of titles and abstracts of proposed papers is invited. These should be sent not later than June 1, 1958 to the program chairman, John G. Cady, Soil Survey Laboratory, Plant Industry Station, U.S. Dept. of Agriculture, Beltsville, Md. Abstracts should be limited to 250 words and should be informative rather than descriptive. The contributor should indicate the time he believes will be required for presentation, bearing in mind that the time available will probably be limited to about 20 minutes.

Proceedings -- It is planned that all formal papers presented at the conference will be published as Proceedings of the Seventh National Clay Conference by the National Research Council.

Field Trip.—A field excursion by chartered bus is planned for Monday, October 20, to typical clay deposits and soil profiles in northeastern Maryland and northern Delaware. Further details will be included in a later announcement.

Lab Visits--A guided tour to the National Bureau of Standards is being planned for Wednesday afternoon, October 22. Informal visits to other laboratories in the Washington area will also be possible.

Final Announcement -- A final announcement will be mailed during the summer, probably about August 1. It will include the titles of the papers to be presented and instructions for pre-registration for the conference and the field trip, payment of registration fee, and making hotel reservations.

Nuclear Energy for Industry

The Third Annual Summer Program in "Nuclear Energy for Industry" will be held on the Berkeley campus of the University of California during the months of June, July and August 1958. An intensive nine-week "Nuclear Engineering Short Course" for engineers and other technical personnel begins June 16. "Nuclear Engineering Survey", a program to acquaint executives and administrators with the nontechnical aspects of nuclear science and show how it can be applied in industry, will be given during the week of July 7.

Both programs are presented by Engineering and Sciences Extension and will make use of University laboratory facilities. Field trips to the U.C. Radiation Laboratory and other installations in the Bay area are being planned, and leading scientists, engineers and businessmen will participate as lecturers. The tuition for the Nuclear Engineering course is \$800. The fee for the nontechnical survey program is \$150. Further information and application for enrollment may be obtained from Engineering and Sciences Extension, Room 100, Bldg. T-11, University of California, Berkeley 4, Calif.

Second International Conference on the Peaceful Uses of Atomic Energy, Geneva, Switzerland, Sept. 1-13, 1958

According to the Atomic Energy Commission, since the first conference held in 1955, private industry and science have increased greatly their contributions in the expanding fields of nuclear research and application. In view of this expanding role in the field, members of the U.S. delegation to the 1958 Conference will be reporting to the world important developments resulting from private initiative with emphasis on power reactor advances. The progress of the Government's peaceful atomic program will also be reported.

REFERENCES TO GEOCHEMICAL PAPERS

Selected by Earl Ingerson from a much longer list published in Information Bulletin No. 8 of the Center of Applied Geochemistry at the University of Brussels.

- GINZBOURG, I. I.: Essai d'élaboration des bases théoriques des méthodes de prospection géochimique des métaux lourds et rares (en russe).

 Gosgeoltechizdat. Moscou 1957, 299, p. 72.
- BOURKSER, E. S., GORNYI, G. I., IVANTICHIN, M. I. et KOULSKAJA, O. A.: (en russe) Matériaux pour la géochimie du Scandium. Kiev. Acad. des Sc. d'Ukr. 1955, 141 p.
- ERISTAVI, D. I.: (en russe) Oxydation et réduction en hydrochimie Gidrokh. Mater. SSSR. 1955, v. 24, p.27-29. LEMEE, G. et CARNIERES, R.: La végétation et les sols des volcans de la chaîne des Puys. Bull. Soc. bot. fr. 1956, 103, p. 7-29.
- MALIOUGA, D. P. et MAKAROVA, A. I.: (en russe) Sur les teneurs en microélements dans quelques sols provenant de roches minéralisées.

 Retchyon 1956 p. 50.52
- Potchvov. 1956, p. 50-53.

 MARMO, V.: Über die Anwendung von Ledum palustre in der biogeochemischen Prospektierung.

 Arch. Soc. 2001 bot. fenn. "Vaname" 1955 9 suppl. p. 170-174
- Arch. Soc. zool. bot. fenn. "Vanamo". 1955, 9, suppl. p. 170-174.

 TOUGARINOV, A. I., VAINSTEIN, E. E. et CHEVALEEVSKI, I. P.: (en russe) Sur le rapport Hf/Zr dans les zircons des roches eruptives et metasomatiques. Geokhim. 1956, No. 4, p. 28-37.

SERVICE D'INFORMATION GÉOLOGIQUE (S. I. G.)

A communication from Monsieur J. Roger brings to the attention of the membership the Service d'Information Geologique, formerly entitled Center of Paleontological Studies and Documentation, which has just been revamped to the Bureau of Geological, Geophysical and Mining Research after having functioned for ten years at the National Museum of Natural History. The Service publishes a trimestrial bulletin which includes numerous articles translated from Russian into French. In addition there are available a large number of abstracts of geological articles in various subfields of the earth sciences.

Further information regarding the activities of the Service may be obtained by writing to J. Roger at the Bureau de Recherches Geologiques, Geophysiques et Minières at 74, Rue de la Federation, Paris (XV), France.

UNIVERSITY TEACHING POSITIONS

The Geochemical News will gladly publish brief notices of teaching positions that are open in the fields of geochemistry, geology, mineralogy, and crystallography, as a service to its membership. Recently the following have come to the attention of the Editor.

University of Alberta

The Department of Geology, University of Alberta, is looking for a mineralogist with a recent Ph.D. in mineralogy and a good background in x-ray investigation. Details may be obtained by contacting Dr. R. E. Rolinsbee, Chairman, Department of Geology, University of Alberta, Edmonton, Alberta, Canada.

University of Western Australia

The Department of Geology of the University of Western Australia has an opening for a mineralogist with some interest in economic geology. He should be trained in modern mineralogical methods, including x-ray techniques, and have had some experience in polished section studies of ore minerals. Further details may be

obtained by communicating with A. J. Williams, Registrar, University of Western Australia, Nedlands, Western Australia.

Southern Methodist University

Southern Methodist University is seeking a geologist-mineralogist to fill a position in the Department of Geology, newly available as the result of a grant from the Magnolia Petroleum Company. Interested persons should correspond directly with Dr. Arthur Richards, Chairman, Department of Geology, Southern Methodist University, Dallas 5, Texas.

CALENDAR OF FORTHCOMING EVENTS

April	
20-23	Canadian-U.S. Chemical Engineering Conf. (Am. Institute of Chemical Engineers and Chemical Institute of Canada); Sheraton-Mt. Royal Hotel, Montreal, Canada.
21-23	Ann. Mtg. American Oil Chemists' Soc.; Peabody Hotel, Memphis, Tenn.
27-30	AAPG Rocky Mtn. Section, 8th Ann. Conv.; Industrial Bldg., Natrona County Fairgrounds, Casper, Wyo.
27-1	Am. Ceramic Soc., 60th Ann. Mtg.; Pittsburgh, Pa.
28-30	Nat'l. Academy of Sciences, Ann. Mtg.; Washington, D.C.
28-1	Ann. Semiconductor Symposium, The Electrochemical Soc.; Statler Hotel, New York City.
May	
1-3	Am. Physical Soc.; Washington, D.C.
1-3	GSA, Southeastern Sec.; Tuscaloosa, Ala.
5-7	Am. Geophysical Union, 39th Ann. Mtg.; Nat. Acad. Sci., Washington, D.C.
8-10	GSA Rocky Mountain Section, Ann. Mtg.; Golden, Colo.
9-11	AIME: Uranium Sec., 3d Ann. Uranium Symposium; Moab, Utah.
12-14	Instrumental Methods of Analysis, Internat'l. Symposium; Houston, Texas.
14	Am. Academy of Arts and Sciences; Brookline, Mass.
17-18	Friends of the Pleistocene. For inf., Wilson M. Laird, Univ. of North Dakota, Grand Forks, N.D.
27-29	3d Ann. Reactive Metals Conf., Niagara Frontier Sec., AIME; Statler Hotel, Buffalo, New York.
June	
2-5	Am. Nuclear Soc., Ann. Mtg.; Los Angeles.
2-6	ASTM Committee on Mass Spectrometry, 6th Mtg.; New Orleans.
9-11	9th Ann. Symp. on Spectroscopy; Chicago.
16-20	Symp. on Molecular Structure and Spectroscopy; Columbus, Ohio.
19-21	Am. Physical Soc.; Ithaca, N.Y.
July	
4-7	Swedish Geological Survey, 100th Jubilee Mtgs.: Stockholm, Sweden.
Sept.	
10-12	Rocky Mountain Minerals Conf., AIME; Salt Lake City.
15-19	13th Purdue Industrial Waste Conf. and Exhibit; Convention Hall, Philadelphia.

ION-EXCHANGE COLUMN

Please Note!

Those of you who are moving and are changing your address, please note that all address changes should be sent directly to the Secretary of the Geochemical Society, Konrad B. Krauskopf, Dept. of Geology, Stanford University, Stanford, California, rather than to the Editor of the Geochemical News.

The sending of address changes to the Editor only means that your copies of the Geochemical News will be delayed in reaching you. This is because the Secretary is responsible for address changes in the templates; addressing is not done in the office of the Editor.

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Our For-What-It's-Worth-Department

The editor has received the following communication: "On page 9 in No. 9 of the Geochemical News it is stated that in terms of motion a second is one 86,400th of a revolution of the earth on its axis. Surely the number should read 86,164? Yours very truly, Einar Jensen (Rjukan, Norway)."

Do any of our other readers have computations on this problem?

However, it is comforting to know that we are not the only "scientific" journal capable of error. Mike Fleischer and others have noted what may easily be the outstanding nonsequitur of the year. From Mineralogical Magazine, Vol. 31, p. 609, 1957, we quote "The refractive indices determined by immersion were found to be alpha 1.502, beta 1.506, gamma 1.515, so that the mineral is presumably orthorhombic."

And in Geokhimiya, 1957, No. 3, page 185, in a paper by A. P. Vinogradov et al., in Table 4 is given an isotopic analysis of the sulfur in the Vengerov meteorite, which fell on October 11, 1959!

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Selected idioblasts from the Unabashed Muddle English Fictionary:

Formula for a successful exomorph: Be a little tactite, don't be full of skarn.

Faithful wife: One who sticks with her husband through all the trouble he never would have had he remained a bachelor.

Subtlety: The art of saying what you think and then getting out of range before it is understood.

Two ancient sports: Antony and Cleopatra.

Stately woman: A long lanky girl with money.

Moron: That which in the summertime on the beach women don't put. Lesson: That which in the summertime on the beach most women put.

Alcatraz: The pen with the lifetime guarantee.

Executive: A man with a worried look on his assistant's face.

Hamburger: Steak that flunked its physical.

Large euhedral titanite: Sphenocryst.

Famous last pun: It is not your fault if there is something fishy about this scarp.

If you think these are terrible, either 1) send in your own, or 2) wait until the next issue.

E. Wm. Heinrich Editor

Department of Mineralogy University of Michigan Ann Arbor, Michigan